## GENITO-URINARY ORGANS.

Report of Cases of Operations on the Kidney. By Dr. Herman Mynter (Buffalo). The author reports eleven operations on the kidney, two of them having been done on one patient. These include one nephrolithotomy, three nephrorraphies for floating kidneys, two nephrotomies for pyonephrosis, two nephrectomies, one for sarcoma of the kidney, one for tuberculosis of the kidney, one nephrotomy for a crushed kidney, and lastly one operation done for supposed cholelithiasis in which a floating kidney was found. Ten of the eleven cases recovered from the operation, although all of them died four weeks later of pneumonia. One nephrectomy resulted in death from suppression of urine. The following are abstracts of the cases:

Case I.—Nephrorraphy for Floating Kidney.—Female, aged fifty-one years. When eighteen years of age she noticed pain in the region of the right kidney. Nevertheless, she had no distressing symptoms till within three years when the pain increased and became more or less permanent. At the same time she commenced to complain of dysuria and, occasionally, of bloody nrine. the last year she had complained of dyspeptic phenomena, had become extremely nervous and hysterical, so much so that her family considered her insane, and avoided her as much as possible. At the examination she looked thin, emaciated, and presented many symptoms of acute melancholia. She complained especially of pain over the right inguinal region. An oval tumor with all the characteristics of the kidney was felt here. It was very movable, could be grabbed through the thin abdominal wall, and moved up and down and in and out. The nrine was normal and the examination gave otherwise negative result. December 24, 1890, nephrorraphy was done by the usual oblique incision along the outer margin of the quadratus lumborum muscle, the kidney was found very movable, moving up and down during respiration. Palpation did not show anything abnormal. The fibrous capsule was opened behind and stripped off for about two square inches, and the kidney fastened by four silkworm gut sutures? two on each side, which passed deeply through the kidney substance, the fibrous capsule and the fascia and muscles. The wound was packed with iodoform gauze down to the kidney itself. The first dressing was allowed to remain in place for fourteen days, and the wound was thereafter dressed in a similar way once a week. She was kept in bed six weeks, and then left the hospital with the wound healed. The kidney was then immovably fixed to the posterior wall. She was a great deal less tender from pressure; she had gained in weight, but her hysterical symptoms had not improved. No after record.

Case II.—Nephrorraphy for Floating Kidney.—Female, aged thirty-nine. She had complained of pain in the right side for four years, occurring after confinement. The pain was steady and the whole region so tender that she could not stand the slightest pressure, and no examination could be made. The pain was accompanied with a severe dragging feeling, and was increased by the slightest exertion. Her general health had commenced to suffer; she was thin, extremely nervous, complained of insomnia and inability to do anything whatever. Menstruation was regular; walking almost impossible on account of pain. Under narcosis a prolapsed and movable kidney in the tender region was discovered. Nephrorraphy was performed on August 6, 1892, in a similar way to first case, only that the fibrous capsule was stripped off from the whole posterior surface, and that six kangaroo tendons were used as sutures.

The after-treatment was the same, and she left for her home in eight weeks. She had gained some in weight, could sleep better, and was less nervous and hysterical, had a good deal less pain, and could stand considerable pressure in the right inguinal region. Nevertheless, she still complains of sleeplessness, and has some tenderness in the region.

CASE III.—Nephrorraphy for Floating Kidney.—Male, aged thirty-two. He had for seven years complained of indigestion. Two years ago, while lifting a heavy weight, he felt "something give away," had considerable pain, but did not pay any particular atten-

tion to it till six months ago, when he felt a tumor in the right side of the abdomen. During the year previously, he had complained of a dull, heavy feeling in the right inguinal region; occasionally in the left inguinal region, too. During the same time his family observed increasing nervousness and irritability, verging on insanity; he was fretful, peevish, lost in health and weight, and was unable to work. By examination, a tender and movable lump was felt in the right inguinal region, having all the characteristics of the kidney. Left kidney was also prolapsed, although not in so high degree, and was somewhat tender.

September 8, 1892, nephrorraphy on right kidney, which was fastened to the posterior wall by six kangaroo tendons, the fibrous capsule having first been stripped off. It was quite difficult to find the kidney and bring it up into the wound, it having fallen far into the abdominal cavity.

The after-treatment was conducted on similar lines as in the other two cases. He was kept in bed eight weeks; the wound is healed, the tenderness considerably decreased, the appetite good, the weight increased, but he is still peevish, fretful and hypochondriac, and spends most of his time in bed. Time alone will show whether the operation will benefit him permanently or not.

Case IV.—Nephrotomy for Pyonephrosis.—Female, aged thirty-five. She had for about one year complained of severe pain in the right lumbar region, coming on periodically every ten or fourteen days. The pain would occur on rising in the morning, and last till about noon, when she would pass a large amount of urine and pus with immediate relief. She would then feel well for a week or two, when a similar attack would occur. Half a year ago a tumor was discovered in the right lumbar region. It was at the examination of the size of the head of a man, filling out the whole space between the ribs and the ilium, and extending forward to the outer margin of the rectus muscle. A distinct deep fluctuation could be felt both anteriorly and posteriorly. The urine contained considerable puss.

On December 12, 1890, nephrotomy—a puncture with a hypodermic needle having previously revealed pus. The incision was made along the outer margin of the quadratus lumborum muscle, the kidney opened, and about three pints of pure yellow pus removed. The interior of the kidney felt like one large pus sac, and no kidney tissue could be felt.

The cavity was irrigated with corrosive sublimate, the sac stitched to the skin, two large drainage tubes introduced, and antiseptic dressings applied. The sac contracted rapidly, and the patient left on January 6, 1891, with the wound almost healed, except a very small fistule through which a little pus was discharged. No subsequent report.

Case V.—Nephrotomy for Pronephrosis.—Male, aged thirty-seven. He had emaciated steadily for two years and complained of frequent urination. He knows of no cause; had received no injury. A large fluctuating swelling was felt over the left kidney, very similar to that of the previous case. The urine contained a large amount of pus. By posterior incision one quart of pus was evacuated, the cavity drained and irrigated. He left the hospital greatly improved in six weeks, but with a fistule discharging some pus. No subsequent report.

Case VI.—Nephrolithotomy.—Female, aged forty-five years. Had complained for two years of dysuria, with bloody urine and pain in left lumbar region. The pain increased gradually, so that she was confined to her bed and had to use morphine continually. In January, 1879, a tumor was discovered in the left lumbar region. It was punctured in March, 1879, and four ounces of pus evacuated. The swelling increased again and perforated at the point of puncture, leaving a fistule behind, through which stones were occasionally discharged. The urine contained considerable pus. The operation was done on December 31, 1879. To give room, two inches of the eleventh rib were resected, but all the tissues were changed into a fibrous, almost cartilaginous, unyielding tissue, and no trace was left of the normal anatomy. The kidney could not be distinguished as such the margin

of the quadratus lumborum being the only thing that could positively be recognized. A number of stones were removed from a cavity in the supposed kidney, but nephrectomy had to be given up. She died four weeks later of pneumonia. Even at the postmortem it was found impossible to separate the kidney. It was intimately connected with the pancreas and colon descendens, as large as a fist, and contained a great number of cavities filled with pus and stones.

Case VII.—Nephrectomy.—Female, aged fifty-three years. She fell down stairs three years ago: one month later she commenced to complain of pain in the left lumbar region, extending down into the thigh, and bloody urine. The pain and bleeding had since recurred periodically, especially when she walked around. Occasionally she had passed clotted blood and had then a good deal of dysuria. At present she complained of a deep-seated, boring and gnawing pain in the left lumbar region, and of frequent micturition of bloody nrine with a great deal of dysuria. A large movable tumor could be felt in the left lumbar region, extending forward almost to the outer margin of the rectus muscle: the tumor felt hard and solid. She had lately commenced to lose flesh, and had a slight yellowish color of the skin. The amount of urine for three days averaged sixty ounces, containing considerable blood and traces of albumen.

October 17, 1892, nephrectomy by König's lumbo-abdominal incision, being a longitudinal incision along the margin of the quadratus lumborum muscle, and curving forward from its lower end along the crista ilei well toward the onter margin of the rectus muscle. Without much difficulty the large tumor was isolated, separated and brought up into the wound. The pedicle was perforated from behind with a blunt aneurism needle near the kidney and doubly ligated with chromated catgut. As additional security, a pair of large curved forceps were applied outside the ligature, and the kidney then removed. The enormous wound was plugged with eighteen yards of odoform ganze strips, and the incisions, except two inches behind, closed with sutures.

The farther result was extremely favorable; the temperature rose once to 102°, but was normal from the fifth day. The amount of urine on first and second days was ten ounces to sixteen ounces; third day, possibly on account of the use of digitalis, sixty ounces, and since that time about sixty ounces every day; the urine became in a few days normal. The wound healed kindly, and the patient left the hospital in four weeks recovered.

Subsequent microscopic examination of the tumor showed it to be a small round-celled sarcoma.

Case VIII.—Nephrectomy following Nephrotomy.—Female, aged twenty-four years. Had for several years complained of pains in left lumbar region. The attacks became more and more frequent, and, at last, almost continuous. During the last half-year she had had painful and frequent micturition. The urine contained a great amount of pus, but was at times almost clear. By the examination a tumor was felt at the left kidney, very sensitive to pressure. The kidney could be felt by bi-manual examination, generally enlarged, and could be easily palpated through the lumbar region.

An explorative incision was made in February, 1891, and about two ounces of pus removed from the pelvis of the left kidney. The wound did not heal, and took on a tuberculous appearance, but the pain was very much relieved, as was the dysuria. Ten weeks later, in May, 1891, the kidney was removed by nephrectomy and found to be tuberculous throughout. Total suppression of urine followed, and she died of uramia four days later. Post-mortem examination was made, but so late that nothing could be decided in regard to the other kidney.

Case IX.—Nephrotomy for Crushed Kidney.—Male, aged twenty-two. Four days previously, had been caught obliquely between the bumpers while coupling cars. He was able to travel thirty miles after the accident, but complained then of faintness, pain, vomiting and dysuria. The urine contained a good deal of blood, tympanites supervened, and the temperature increased. At the exam-

ination profuse ecchymosis was seen around the anus and perineum, the urine was of dark, dirty color, intensely mixed with blood; a fullness and diffuse ecchymosis were seen in the right lumbar region. As the diagnosis of crushed kidney seemed evident, the patient was removed to Buffalo the same night, and nephrotomy performed right away on his arrival. The kidney was found lying in a large cavity filled with blood and urine, and the lower half was crushed to a pulp. The bleeding was so copious that nephrectomy could not be done; the whole cavity was plugged with iodoform gauze. The urine passed for a time through the wound, the crushed parts came away by irrigation, and he left the hospital recovered in eight weeks. He was killed on the same railroad half a year later.

Case X.—Exploratory Operation for Floating Kidney.—Female, aged forty-five. Had for six months complained of severe pain one and a half inches to the right of the ensiform cartilage. The pain would come periodically, and be attended with yellow color of skin and conjunctive and clay-formed stools. Five weeks previous to her entrance in the hospital she had symptoms indicating peritonitis, followed by a very severe attack of pain and jaundice, lasting four days. She felt then a lump in the right hypochondriac region of the size of an egg, and corresponding to the gall bladder. She entered in order to have a cholecystotomy performed, it being supposed from the history and symptoms that she suffered from gall-stone colic. Over the region of the gall bladder a pear-formed, nodulated, apparently immovable tumor was felt, which had all the appearances of an indurated gall bladder filled with gall stones.

An exploratory incision was made in September, 1892, along the right margin of the rectus muscle, but on entering the abdominal cavity no tumor was found, and even the gall bladder was absent. A hard lump was felt behind the colon transversum. An opening having been torn through the messentery of the colon transversum, it was found to be a floating kidney. The wound was, therefore, closed, and the patient left the hospital in two weeks. She has felt well since, and so far had no attacks.—Buffalo Medical and Surgical Journal, January, 1893.